

IN THE CLAIMS

1-49. (cancelled)

50. (previously presented) A method for controlling an electrophotographic printer or copier that has at least one developer station for developing a latent charge image on a photoconductor with toner, comprising the steps of:

detecting a toner discharge from the developer station during the print operation and starting a developer regeneration process when the detected toner discharge fulfills a predetermined first regeneration criterion;

generating a charge image on the photoconductor, developing the charge image by the developer station, and removing the developed image by a cleaning device without being transfer-printed onto a recording medium; and

introducing new toner into the developer station.

51. (previously presented) A method according to claim 50 wherein an average toner discharge is determined for time intervals of predetermined length, and in which the first regeneration criterion is fulfilled when the average toner discharge has fallen below a predetermined threshold for a predetermined number of successive time intervals.

52. (previously presented) A method according to claim 50 wherein the printer or copier has a transfer belt on which the developed toner image is transfer-printed from the photoconductor in normal operation and from which the transfer-printed toner image is transfer-printed onto the recording medium.

53. (previously presented) A method according to claim 52 wherein in the developer regeneration process, the developed image is wholly or partially transfer-printed onto the transfer belt and the transfer-printed portion of the image is removed from the transfer belt by a transfer belt cleaning device, and a portion of the image that is not transfer-printed is removed from the photoconductor by a photoconductor cleaning device.

54. (previously presented) A method according to claim 53 wherein the developed image is transfer-printed onto the transfer belt at 75% to 100% in the developer regeneration process.

55. (previously presented) A method according to claim 52 wherein the transfer belt is moved forward of the transport path of the recording medium in the developer regeneration process.

56. (previously presented) A method according to claim 50 wherein whole-area patterns with an areal coverage of 10% to 50% are generated on the photoconductor in the developer regeneration process.

57. (previously presented) A method according to claim 50 wherein the toner discharge is determined using print data.

58. (previously presented) A method according to claim 57 wherein the toner discharge is determined in that a printed pixel count or a pixel count to be printed is added up and weighted with its inking level.

59. (previously presented) A method according to claim 50 that provides a preparation mode into which the printer or copier is brought before a beginning of print operation, and in which the printer or copier is brought into the preparation mode at a beginning of the developer regeneration process.

60. (previously presented) A method according to claim 59 wherein the preparation mode comprises at least one of the following operations:

powering up the developer station,

function testing of the developer station,

activating the developer, and

calibrating operating parameters.

61. (previously presented) A method according to claim 50 wherein the printer or copier comprises a plurality of developer stations whose toner discharge is respectively detected and in which for the case that the developer regeneration

process is started for one developer station, it is checked whether the detected toner discharge of the remaining developer stations fulfills a second regeneration criterion, and a developer regeneration process is likewise started for developer stations in which the second regeneration criterion is fulfilled.

62. (previously presented) A method according to claim 61 wherein the second regeneration criterion is fulfilled when the average toner discharge has fallen below a predetermined threshold for a predetermined number of successive time intervals that is less than the predetermined threshold in the first regeneration criterion.

63-71 (cancelled)

72. (previously presented) A method of claim 63 wherein a toner discharge is detected from a developer station during the print operation and starting a developer regeneration process wherein the detected toner discharge fulfills a predetermined first regeneration criterion, and generating a charge image on the photoconductor, developing the charge image by the developer station, and removing the developed image by a cleaning device without being transferred-printed onto a recording medium, and introducing new toner into the developer station.

73-74 (cancelled)

75. (previously presented) A control device for an electrophotographic printer or copier that has at least one developer station for developing a latent charge image on a photoconductor with toner, said control device performs the functions of:

detecting toner discharge from the developer station during print operation and which starts a developer regeneration process when the detected toner discharge fulfills a predetermined first regeneration criterion;

when a charge image is generated on a photoconductor, detecting the charge image by the developer station and removing the developed image by a cleaning device without being transfer-printed onto a recording medium; and

introducing new toner into the developer station.

76. (previously presented) A control device according to claim 75 that is suited to determine an average toner discharge for time intervals of predetermined length, and in which the first regeneration criterion is fulfilled when the average toner discharge has fallen below a predetermined threshold for a predetermined number of successive time intervals.

77. (previously presented) A control device according to claim 75 wherein the printer or copier has a transfer belt on which the developed toner image is transfer-printed from the photoconductor in normal operation and from which the transfer-printed toner image is transfer-printed onto the recording medium.

78. (previously presented) A control device according to claim 77 wherein in the developer regeneration process the developed image is wholly or partially transfer-printed onto the transfer belt and the transfer-printed portion of the image is removed from the transfer belt by a transfer belt cleaning device, and a portion of the image that is not transfer-printed is removed from the photoconductor by a photoconductor cleaning device.

79. (previously presented) A control device according to claim 78 wherein the developed image is transfer-printed onto the transfer belt at 75% to 100% in the developer regeneration process.

80. (previously presented) A control device according to claim 77 that triggers removal of the transfer belt forward of a transport path of the recording medium in the developer regeneration process.

81. (previously presented) A control device according to claim 75 that determines the toner discharge using print data.

82. (previously presented) A control device according to claim 81 that determines the toner discharge in that a printed pixel count or a pixel count to be printed is added up and weighted with its inking level.

83. (previously presented) A control device according to claim 75 that provides a preparation mode into which the printer or copier is brought before a

beginning of the print operation, and that brings the printer or copier into the preparation mode at a beginning of the developer regeneration process.

84. (previously presented) A control device according to claim 83 in which the preparation mode comprises at least one of the following operations:

powering up the developer station,

function testing of the developer station,

activating the developer, and

calibrating operating parameters.

85. (previously presented) A control device according to claim 76 wherein the printer or copier comprises a plurality of developer stations whose toner discharge is respectively detected and when it starts the developer regeneration process for one developer station the control device checks whether detected toner discharge of remaining developer stations fulfills a second regeneration criterion, and starts a developer regeneration process for developer stations in which the second regeneration criterion is fulfilled.

86. (previously presented) A control device according to claim 85 wherein the second regeneration criterion is fulfilled when an average toner discharge has fallen below a predetermined threshold for a predetermined number of successive time intervals that is lower than the predetermined threshold given the first regeneration criterion.

87-95 (cancelled)

96. (previously presented) A control device according to claim 87 wherein said control device also performs the functions of detecting toner discharge from the developer station during print operation and which starts a developer regeneration process wherein the detected toner discharge fulfills a predetermined first regeneration criterion, and when a charge image is generated on a photoconductor, detecting the charge image by the developer station and removing the developed

image by a cleaning device without being transfer-printed onto a recording medium, and introducing new toner into the developer station.

97-98 (cancelled).